

IN THE SPECIFICATION:

Please replace the title with the following amended title:

WELLBORE PUMPING APPARATUS WITH IMPROVED TEMPERATURE PERFORMANCE AND METHOD OF USE.

Please replace paragraph [0022] with the following:

Each footed borehole 18 includes an entrance section 20 at which the footed borehole 18 deviates from the centerline 17 of the first borehole 10 (in Figure 1 adjacent the lower terminus 16 thereof), from which the footed borehole 18 extends to form a foot 22 terminating at toe 24. The angle between the centerline of the first borehole 10 and the footed borehole changes between the foot 22 and entrance section 20, such that a generally curved portion 26 is located between foot 22 and entrance section 20. As the curved section begins to decrease in curvature as the generally straight section of the foot 22 is reached, heel [[30]]27 is positioned. The generally horizontal first borehole 10 is preferably cased, whereas the footed borehole 18 is not cased, but is preferable screened, such as by placing a plurality of cylindrical screen elements (not shown) therein to allow the passage of fluid therein, but to block a portion of any sand or other particulates which will otherwise flow into the footed borehole 18. Although the first borehole 10 is shown extending downwardly into the earth beyond the opening of footed borehole 18 therefrom to reach other possible producing locations, first borehole 10 and footed borehole 18 may be formed as one continuous borehole, such that no continuing portion of first borehole 10 is provided

Please replace paragraph [0023] with the following:

Referring still to Figure 1, a tube 32, having a rod 34 suspended therein, is hung from wellhead 12 and extends into the first bore 10 to terminate within footed borehole

18. At the end of tube 32 terminating within the footed borehole 18 is located a pump 38. In the preferred embodiment, pump 38 is a progressing cavity pump, which is powered downhole by rod 34. Rod 34 extends through the entire length of the tube 32, terminating at one end thereof in engagement with the rotor (shown in Figures 2 and 3) of the progressing cavity pump, and at the second end thereof in engagement with a drive motor 40, typically an electric motor, shown schematically and located adjacent the wellhead 12. As rod 34 is rotated, it causes the pump to pressurize the well fluids and pump them up the tube 32 through which rod 34 extends. To enable rod 34 to rotate in tube 32 without interfering engagement with the tube 32, a plurality of stabilizers 42 may be provided in the tube through which the rod extends to space rod 34 from the inner surface of tube 32, and which stabilizers are substantially permeable to oil being pumped therethrough from pump 38 to well head 12. Additionally, a pressure sensor 30 is provided on the exterior of the pump, and communicates the pressure at the pump intake to a controller 33 (shown schematically) at the surface 14 through wire 31.

Please replace paragraph [0026] with the following:

Referring now to Figure 3, there is shown the pump 38 in location at the heel [[30]]27 section of footed wellbore 18. As shown in Figure 3, pump 38 is landed at the base of the heel 30, positioned at the lowest side of the footed borehole 18. The pump 38 is positioned within the well fluid, such as oil, steam vapor, and steam condensate, such that the liquid extends above the pump 38 in the bore 18 to at least a position above the pump 38. Thus the oil extends to an interface 70, at which the oil meets a pressure near that of atmospheric pressure with the additional pressure of gas and steam vapor in the tube 32, i.e., a natural height based upon the hydrostatic pressure of the oil in the footed borehole 18. In the embodiment shown, the footed wellbore 18 extends in a field in which secondary recovery of fluid is being undertaken, typically using heat in the form of steam to free the oil from the surrounding formation. Thus, typically, steam is injected at very high pressure from a steam generator (not shown) into injection wellbores (not shown) above the footed borehole 18, thereby reducing the

viscosity of the heavy oil which it encounters by raising the temperature thereof. This heavy oil, having an elevated temperature, then flows under gravity to the footed borehole 18 located below the injection borehole for recovery thereof. The heavy oil will enter the footed borehole 18 at high temperatures, typically in the 300 to 500 degree Fahrenheit range, and having steam condensate mixed with the oil.